Contents of Volume 50

Number 1, January 1992

A *Toxoplasma* gondii rhoptry protein associated with host cell penetration has unusual charge asymmetry
P.N. Ossorio, J.D. Schwartzman and J.C. Boothroyd (U.S.A.) 1
Purification and properties of *Plasmodium falciparum* malate dehydrogenase
N. Lang-Unnasch (U.S.A.) 17
The isolation, characterization and cloning of a globin-like, host-protective antigen from the excretory-secretory products of *Trichostrongylus colubriformis*
M.J. Frenkel, T.A.A. Dopheide, B.M. Wagland and C.W. Ward (Australia) 27
Two types of sequence polymorphism in the circumsporozoite gene of *Plasmodium falciparum*
T.F. McCutchan, A.A. Lal, V. do Rosario and A.P. Waters (U.S.A.) 37
Cloning, sequencing, and demonstration of polymorphism in trypanothione reductase from *Crithidia fasciculata*
H. Field, A. Cerami and G.B. Henderson (U.S.A.) 47
Molecular cloning and expression of the gene encoding the kinetoplast-associated type II DNA topoisomerase of *Crithidia fasciculata*
S.G. Pasion, J.C. Hines, R. Aebersold and D.S. Ray (U.S.A., Canada) 57
A phosphoglycerate kinase-related gene conserved between *Trypanosoma brucei* and *Crithidia fasciculata*
B.W. Swinkels, A. Loiseau, F.R. Opperdoes and P. Borst (The Netherlands, Belgium) 69
Identification and characterization of an *Onchocerca volvulus* cDNA clone encoding a microfilarial surface-associated antigen
S. Lustigman, B. Brotman, E.H. Johnson, A.B. Smith, T. Huima and A.M. Prince (U.S.A., Liberia) 79
Nucleotide sequence of a second alpha giardin gene and molecular analysis of the alpha giardin genes and transcripts in *Giardia lamblia*
R.A. Alonso and D.A. Peattie (U.S.A.) 95
Isolation, sequence and molecular karyotype analysis of the actin gene of *Cryptosporidium parvum*
K. Kim, L. Goozé, C. Petersen, J. Gut and R.G. Nelson (U.S.A.) 105
Recurrent polymorphisms in small chromosomes of *Leishmania tarentolae* after nutrient stress or subcloning
L. Rovai, C. Tripp, K. Stuart and L. Simpson (U.S.A.) 115
Isolation and partial characterization of a surface glycoconjugate of *Entamoeba histolytica*
S.L. Stanley, Jr., H. Huizenga and E. Li (U.S.A.) 127
The 42-kilodalton rhoptry-associated protein of *Plasmodium falciparum*
A. Saul, J. Cooper, D. Hauquitz, D. Irving, Q. Cheng, A. Stowers and T. Limpaiboon (Australia) 139
Loss of the GP46/M-2 surface membrane glycoprotein gene family in the *Leishmania braziliensis* complex
D. McMahon-Pratt, Y. Traub-Cseko, K.L. Lohman, D.D. Rogers and S.M. Beverley (U.S.A.) 151
The movement of fluorescent endocytic tracers in *Plasmodium falciparum* infected erythrocytes
K. Haldar and L. Uyetake (U.S.A) 161
Single amino acid variation in the ookinete vaccine antigen from field isolates of *Plasmodium falciparum*
S. Ya-Ping, M.P. Alpers, M.M. Povoa and A.A. Lal (U.S.A., Papua-New Guinea, Brazil) 179
Two novel alleles within subfamilies of the merozoite surface antigen 2 (MSA-2) of *Plasmodium falciparum* (Short Communication)
V.M. Marshall, R.L. Coppel, R.F. Anders and D.J. Kemp (Australia) 181
Isolation of an *Entamoeba histolytica* cDNA clone encoding a protein with a putative zinc finger domain (*Short Communication*)
S.L. Stanley, Jr. and E. Li (U.S.A.) 185

Number 2, February 1992

Kinetoplast DNA and molecular karyotypes of *Trypanosoma evansi* and *Trypanosoma equiperdum* from China
Z.-R. Lun, R. Brun and W. Gibson (U.K.) 189
Multiple forms of chromosome I, II and V in a restricted population of *Leishmania infantum* contrasting with monomorphism in individual strains suggest haploidy or automixy
C. Blaineau, P. Bastien and M. Pagès (France) 197
Effects of hypoxia and acute osmotic stress on intermediary metabolism in *Leishmania* promastigotes
M.J. Walsh and J.J. Blum (U.S.A.) 205
Cloning of a 21.7-kDa vaccine-dominant antigen gene of *Schistosoma mansoni* reveals an EF hand-like motif
P. Francis and Q. Bickle (U.K.) 215
The major cysteine proteinase (cruzipain) from *Trypanosoma cruzi* is encoded by multiple polymorphic tandemly organized genes located on different chromosomes
O. Campetella, J. Henriksson, L. Åslund, A.C.C. Frasch, U. Pettersson and J.J. Cazzulo (Argentina, Sweden) 225
Some kinetic properties of pyruvate kinase from *Trypanosoma brucei*
M. Callens and F.R. Opperdoes (Belgium) 235
Ferritins of *Schistosoma mansoni*: sequence comparison and expression in female and male worms
J. Dietzel, J. Hirzmann, D. Preis, P. Symmons and W. Kunz (F.R.G.) 245
Comparison of the body wall myosin heavy chain sequences from *Onchocerca volvulus* and *Brugia malayi*
C. Werner and T.V. Rajan (U.S.A.) 255
Characterization of a myosin heavy chain gene from *Brugia malayi*
C. Werner and T.V. Rajan (U.S.A.) 261
Cysteine is an essential growth factor for *Trypanosoma brucei* bloodstream forms
M. Duszenko, K. Mühlstedt and A. Broder (F.R.G.) 269
Identification of a novel *Brugia pahangi* β-tubulin gene (β2) and a 22-nucleotide spliced leader sequence on β1-tubulin mRNA
S. Guénette, R.K. Prichard and G. Matlashewski (Canada) 275

Cloning of a cDNA encoding phosphoenolpyruvate carboxykinase from *Haemonchus contortus*
R.D. Klein, C.A. Winterrowd, N.T. Hatzenbuhler, M.H. Shea, M.A. Favreau, S.C. Nulf and T.G. Geary (U.S.A.) 285
Three β-tubulin cDNAs from the parasitic nematode *Haemonchus contortus*
T.G. Geary, S.C. Nulf, M.A. Favreau, L. Tang, R.K. Prichard, N.T. Hatzenbuhler, M.H. Shea, S.J. Alexander and R.D. Klein (U.S.A., Canada) 295
Secondary processing of the *Plasmodium falciparum* merozoite surface protein-1 (MSP1) by a calcium-dependent membrane-bound serine protease: shedding of $MSP1_{33}$ as a noncovalently associated complex with other fragments of the MSP1
M.J. Blackman and A.A. Holder (U.K.) 307
The role of calcium in the invasion of human erythrocytes by *Plasmodium falciparum*
N. McCallum-Deighton and A.A. Holder (U.K.) 317
Structure and expression of the gene for Pv200, a major blood-stage surface antigen of *Plasmodium vivax*
H.L. Gibson, J.E. Tucker, D.C. Kaslow, A.U. Krettli, W.E. Collins, M.C. Kiefer, I.C. Bathurst and P.J. Barr (U.S.A.) 325
Repeat structures in a *Plasmodium falciparum* protein (MESA) that binds human erythrocyte protein 4.1
R.L. Coppel (Australia) 335
Sequence of a 16-kilodalton sexual stage and sporozoite surface antigen of *Plasmodium reichenowi and comparison with Pfs 16 of Plasmodium falciparum* (*Short Communication*)
I.I.M.D. Moelans, A.A. Lal, R.N.H. Konings and J.G.G. Schoenmakers (The Netherlands, U.S.A.) 349
DNA recombination associated with short direct repeats in *Leishmania mexicana* M379 (*Short Communication*)
J. Liu, G. Salinas, N. Gajendran, D. Muthui, S. Muyldermans and R. Hamers (Belgium) 351
Isolation and characterization of genomic clones encoding a serine-rich *Entamoeba histolytica* protein (*Short Communication*)
E. Li, C. Kunz-Jenkins and S.L. Stanley, Jr. (U.S.A.) 355
Author Index 359
Subject Index 361
Contents of Volume 50 363